

The background of the slide is a close-up photograph of numerous water droplets of varying sizes. The droplets are clear and glistening, reflecting light, and are set against a light blue, textured surface that appears to be a leaf or a similar natural material. The overall effect is fresh and organic.

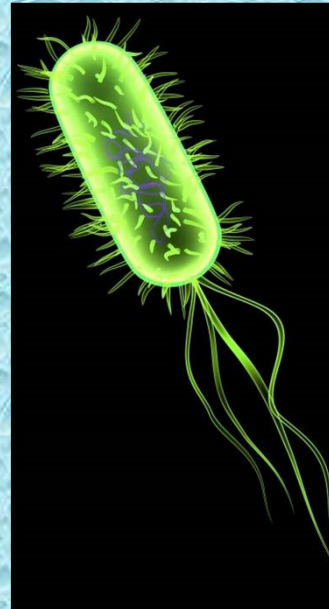
Characteristics of Living Things

All Living Things...

1. Are made up of cells
2. Are based on a universal genetic code
3. Obtain and use energy
4. Grow AND develop
5. Reproduce
6. Respond to the environment
7. Maintain a stable internal environment
8. Change over time

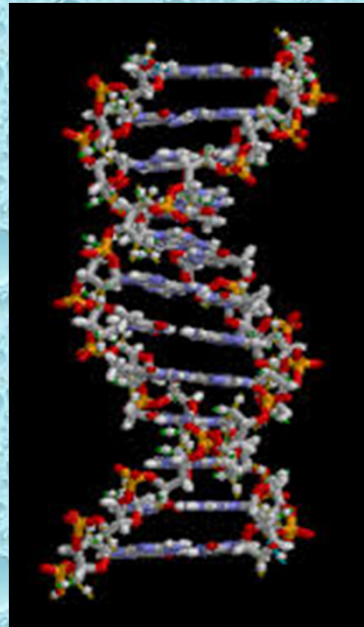
1. Are Made Up of Cells

- **Cell** =
 - Basic unit of all forms of life
- **Unicellular** =
 - Made of one cell
- **Multicellular** =
 - Made of many cells



2. Are Based on a Universal Genetic Code

- Organisms store hereditary info in their **DNA** =
 - Genetic material that organisms inherit from their parents



3. Obtain and Use Energy

- **Metabolism** =
 - Chemical reactions through which an organism builds up or breaks down materials



4. Grow AND Develop

- Cells divide and differentiate



5. Reproduce

- **Sexual reproduction** =
 - Cells from 2 parents unite to form the first cell of a new organism
- **Asexual reproduction** =
 - Single parent produces offspring identical to itself



"Nice try! We only need *one* of you. You can just turn around and be on your way, buddy."

6. Respond to the Environment

- **Stimulus** =
 - Signal to which an organism responds
 - Light, temperature, sound, etc.
- Examples:
 - Hibernation
 - Migration
 - Phototropism
 - Pupil dilation



7. Maintain a Stable Internal Environment

- **Homeostasis** =
 - Relatively constant internal physical and chemical conditions that organisms maintain
- Examples:
 - Sweating
 - Shivering
 - Kidneys-retain water
 - Pancreas-produce insulin



8. Change Over Time

- Over generations, groups of organisms evolve

